REMARKS

Claims 1, 3-20 and 25-30 are pending in the application. Claims 1 15, and 25 are independent claims. Claims 21-24 are cancelled without prejudice or disclaimer of the subject matter recited therein. The Examiner's statement that claims 15-18 are allowed is acknowledged.

Claims 25-30 are added herein. Claim 25 recites a biosensor that comprises an electrode support substrate being formed to define an electrode array and leads extending from the array, a sensor support substrate positioned on the electrode support substrate, the sensor support substrate being formed to include notches and an opening, at least a portion of each notch being aligned with one lead and the opening being spaced-apart from the leads, and electrically conductive tracks positioned on the sensor support substrate, each track extending across one of the notches and into engagement with one lead. Claims 26-30 depend from claim 25. Support for the new claims is found in the specification and drawings. No new matter is added by virtue of the new claims.

Claims 5, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 5 has been amended to depend from claim 4. As such, the antecedent basis issue has been corrected.

Claims 19 and 20 depend from base claim 15. Lines 2 of claim 15 recites, "an electrode array". Claims 19 and 20 each recite "the electrode array". As such, it is submitted that sufficient antecedent basis for the term "electrode array" exists for claims 19 and 20.

Reconsideration of the rejection, in light of the amendments, leading to withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 1-5, 10, 11, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfab et al. (USP 5,018,527). Pfab et al. disclose a sensor for measuring ionic activity by means of ion-selective membranes and respective shunts. See, Column 1 lines 40-42.

Claim 1 has been amended to recite that its biosensor comprise "a sensor support substrate... having a first surface, and opposite second surface facing the electrode support substrate, and notches extending between the first and second surfaces, each notch being aligned with a portion of one electrode, a capillary channel, at least a portion of the electrodes being positioned in the capillary channel, and electrically conductive tracks positioned on the first surface of the sensor support substrate, a portion of each track extending from the first surface into at least one notch and being in electrical communication with one of the electrodes". Support for the amendment is found in the specification at page 5 lines 1-6, page 6 lines 1-15, page 7 lines 5-7, and Figures 1- 8. No new matter is added by virtue of the amendment.

It is submitted that there is no teaching or suggestion in Pfab et al. of either the connection surfaces (26) or the conductive lines or structures (22) extending into a notch. Instead, Pfab et al. relies on contacts (25) to promote connection. Specifically, Pfab et al. disclose an uppermost layer (18) with connection surfaces (26), three lower substrate layers (19 to 21) with conductive lines or structures (22), and contacts (25). As shown in Figure 3, it appears that one set of contacts (25) extends between the layers (18 to 21) a second set of contacts extends between the layers (18 to 20), and a third set of contacts extends between the layers (18 to 22).

Moreover, there is no teaching or suggestion in Pfab et al. of any portion of its connection surfaces (26) or of its conductive lines or structures (22) being positioned in a *capillary* channel. Pfab et al. teach that layers (18 to 21) are laminated with one another and that three lower substrate layers (19 to 21) are provided with conductive lines or structures. Column 9 lines 18-31. It is noted, as shown in Figures 4 - 6, that it is the front faces (23) of the structures (22) that meet the membranes (29). See Column 9 line 55 to Column 10 line 14. Further, it is these membranes that are contacted with the organ surface or the sample fluid. Column 8 lines 49-51.

Accordingly, there is simply no disclosure or suggestion in Pfab et al. of a biosensor comprising "an electrode support substrate, electrodes positioned on the electrode support

substrate, a sensor support substrate coupled to the electrode support substrate, the sensor support substrate having a first surface, and opposite second surface facing the electrode support substrate, and notches extending between the first and second surfaces, each notch being aligned with a portion of one electrode, a capillary channel, at least a portion of the electrodes being positioned in the capillary channel, and electrically conductive tracks positioned on the first surface of the sensor support substrate, at least a portion of each track extending from the first surface into at least one notch and being in electrical communication with one of the electrodes", as recited in amended claim 1.

As such, claim 1 as amended is not anticipated and are believed to be patentable over Pfab et al. Claims 2-5, 10, 11, 13, and 14 depend from amended claim 1. Reconsideration of the rejection in light of the amendments, leading to withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 1, 4, 5, and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugihara et al. (USP 6,132,683). Sugihara et al. discloses a low impedance cell potential measuring electrode assembly having microelectrodes on an insulating substrate and having a wall enclosing the region including the microelectrodes. See, the abstract.

As discussed above, claim 1 has been amended to recite that its biosensor comprise "a sensor support substrate... having a first surface, and opposite second surface facing the electrode support substrate, and notches extending between the first and second surfaces, each notch being aligned with a portion of one electrode, a capillary channel, at least a portion of the electrodes being positioned in the capillary channel, and electrically conductive tracks positioned on the first surface of the sensor support substrate, at least a portion of each track extending from the first surface into at least one notch and being in electrical communication with one of the electrodes".

It is submitted that there is no teaching or suggestion in Sugihara et al. of its integrated multiple electrode (2) being positioned in a capillary channel. In that regard, the Examiner's attention is directed to Column 7 lines 28-58, which discloses the relative

positioning of the cylindrical member (6) and the microelectrodes (11) and reference electrodes (10) of the integrated multiple electrode (2). At most, Sugihara et al. disclose that the member (6), which has a wall of about 22 mm in inside diameter and 8 mm in height, is filled with aqueous solution. A current is passed through the solution to cause platinum blacks (11*a*) (or alternatively, reference electrode platinum black 10*a*) to precipitate on the surfaces of the microelectrodes (11) and reference electrode (10). Such a configuration fails to disclose or suggest the existence of a capillary channel having at least a portion of electrodes positioned therein.

In addition, Sugihara et al. provides no disclosure or suggestion of its pins (9) being positioned on a first surface of a sensor support substrate, let alone extending from the first surface into at least one notch. In that regard, the Examiner's attention is directed to Figures 2 and 6B, which illustrate that the upper holder (3) includes pins (9(9a)) that extend through the holder (3). An isolated view of one such pin (9) is shown in Figure 8.

Accordingly, it is submitted that there is no disclosure or suggestion in Sugihara et al. of a biosensor comprising "an electrode support substrate, electrodes positioned on the electrode support substrate, a sensor support substrate coupled to the electrode support substrate, the sensor support substrate having a first surface, and opposite second surface facing the electrode support substrate, and notches extending between the first and second surfaces, each notch being aligned with a portion of one electrode, a capillary channel, at least a portion of the electrodes being positioned in the capillary channel, and electrically conductive tracks positioned on the first surface of the sensor support substrate, at least a portion of each track extending from the first surface into at least one notch and being in electrical communication with one of the electrodes", as recited in amended claim 1.

Accordingly, claim 1 as amended is not anticipated and are believed to be patentable over Sugihara et al. Claims 4, 5, and 10-14 depend from amended claim 1. Reconsideration of the rejection in light of the amendments, leading to withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfab et al. in view of Yamamoto et al. (USP 6,071,392). Yamamoto et al. disclose a cholesterol sensor.

Pfab et al. have been discussed above with reference to independent claim 1. As discussed above, there is no description or suggestion in Pfab et al. of a biosensor as recited in amended claim 1. Yamamoto et al. fail to cure the inadequacies of Pfab et al. Claims 6-9 depend from claim 1.

It is respectfully contended that the differences between the claimed invention and the cited art are such that Applicants' invention as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made. It is respectfully contended that the claimed invention meets the test of patentability under 35 U.S.C. 103(a). Reconsideration of the rejection and allowance of the claim is respectfully requested.

The claims are believed to be in condition for allowance, and allowance of the application is respectfully requested. It is requested that this paper be considered a Petition for Extension of time sufficient to effect a timely response, and that all fees due be charged to Deposit Account Number 02-2958 with reference to (RDID 0034 US).

Respectfully submitted,
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